

DIY – Building a Rain Barrel From a Pickle Barrel

This factsheet is to be used with a DIY YouTube video which shows the rain barrel being constructed. The video is available online at:

https://www.youtube.com/watch?v=sKC8wJU_Uvo&feature=youtu.be.

Tools

- Jig Saw
- Snips
- Safety Glasses
- Pipe Wrench
- Pocket Knife
- Permanent Marker
- Screw Driver
- 2 3/8 Hole Saw
- 1 5/8 Hole Saw
- Flash Light
- Scissors
- Paddle Bit
- Adjustable Wrench
- Saw
- Electric Drill

Materials

- Pickle Barrel (Dark in Color) with a Screw Top and Grate
- 2-Inch Threaded Female Adaptor PVC Schedule 40*
- 2-Inch O-Ring
- 2-Inch Threaded Male Adapter PVC Schedule 40*
- Two Small Pieces of Schedule 40 PVC Pipe approximately 2-Inch long
- 45 Degree Two-Inch PVC Elbow
- 22 ½ Degree Two-Inch PVC Elbow
- 2 ½ Feet Long, 2-Inch Schedule 40 PVC Pipe for Overflow (note: different for different barrel depends on height of barrel)
- ½ Inch Bulkhead Fitting
- ½ Inch Brass Spigot
- Aluminum Screen
- Cable/zip Tie (11 inch)
- PVC Cement
- Plumber's Thread Tape

*The thread dimensions need to have a high tolerance for the 2-Inch PVC Schedule 40 male and female threaded adaptors (e.g., NIBCO brand).

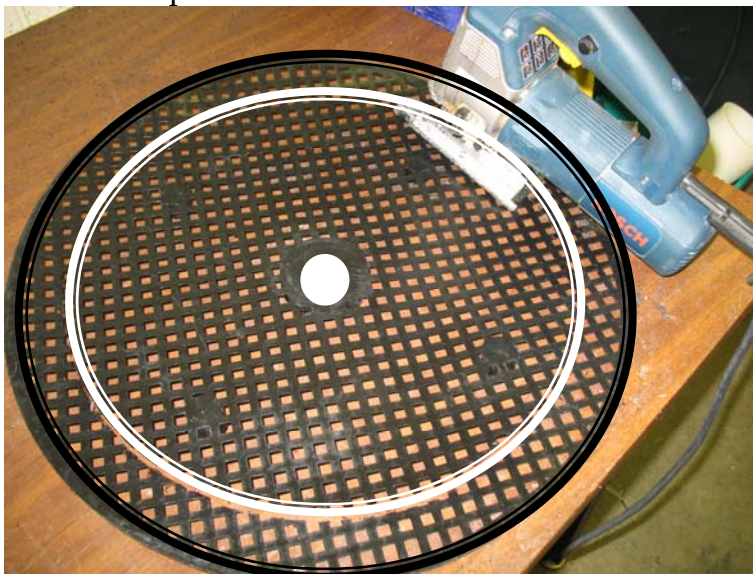
Instructions

Lid/Inlet

1. Unscrew the lid, and take the lid and solid top insert off the barrel and set aside.
2. Take the grate from inside the barrel and set aside.
3. Cut the center section of the solid top insert out along the ridge using the jig saw (see image below).
4. After cutting center section out, use a pocket knife to remove any burrs left on the edges.



5. Find the center of the grate (noted by white dot on photo below).
6. Measure 7 ½ inches from the center of the grate toward the outer edge and mark with a permanent marker (noted by white line on photo below).
7. Using snips cut along line.
8. The grate should fit inside the top insert.



9. Cut a piece of aluminum screen (same size and shape) as the grate (see photo below).



Outlet/Overflow

10. Locate the seam on the barrel. It's recommended not drilling the overflow hole on the seam.
11. Choose a location to drill the overflow hole using the 2 3/8 hole saw. The distance from the bottom of the barrel to the overflow hole will vary depending on the drainage system setup chosen but generally the overflow hole is 2-3 inches from the bottom of the barrel.
12. You will need the following for overflow pipe assembly:
 - 2 ½ feet, 2-inch schedule 40 PVC pipe (note: different for different barrel depends on height of barrel)
 - Two 2-inch long, 2-inch schedule 40 PVC pipe
 - 45 degree 2-inch PVC elbow
 - 22 ½ degree 2-inch PVC elbow
 - 2-Inch threaded male adapter schedule 40 PVC pipe*
 - 2-Inch threaded female adaptor schedule 40 PVC pipe*
 - 2-Inch O-ring
 - PVC cement

*The thread dimensions need to have a high tolerance for the 2-inch PVC schedule 40 male and female threaded adaptors (e.g., NIBCO brand).

Instructions:

- a) Using PVC cement, glue the 22 ½ degree 2-inch PVC elbow to the 2-inch long, 2-inch schedule 40 PVC pipe.
- b) Next find the seam of the 22 ½ degree 2-inch PVC elbow and the seam of the 45 degree 2-inch PVC elbow. Match the two seams up, and glue the 45 degree 2-inch PVC elbow to the newly glued piece assembly in the previous step.
- c) Next glue the 2-Inch threaded male adapter PVC schedule 40 to the 45 degree 2-inch PVC elbow.
- d) Now glue the 2 ½ feet, 2-inch schedule 40 PVC pipe to the 22 ½ degree 2-inch PVC elbow (note: different lengths for different barrels, depends on height of barrel).

Overflow Installation

13. Place the overflow assembly inside the barrel.
14. Place the end of the overflow (male adapter end) in the overflow hole. (Make sure the 2 inch O-ring is on the male adaptor on the inside of the barrel, not the outside.)
15. On the outside of the barrel, screw on the 2-inch female adaptor schedule 40 PVC pipe. (Make sure that the adaptor is snug, but not too snug as to distort the O-ring.)
16. Place a piece of aluminum screen over the overflow pipe on the inside of the barrel using a cable/zip tie. Make sure that the O-ring and the bulkhead gasket are on snug, but not too snug as to distort the O-ring and the gasket.

Outlet/Spigot

17. Choose a location to drill the hole for the spigot using the 1 5/8 hole saw.
18. Place the ½ inch bulkhead fitting in the spigot hole. (Make sure the gasket of the bulkhead fitting is on the inside of the barrel, not the outside and that the bulkhead fitting is snug, but not too snug as to distort the gasket.)
19. Place plumber's thread tape around the threads of the spigot. Using an adjustable wrench, screw the spigot into the bulkhead fitting.
20. Screw the lid with grate and screen onto the barrel.
21. Now you are ready to install and use your barrel.

Ashley Osborne and Roger Rhodes. Environmental and Natural Resource Issues Task Force. March 2015.



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